

DETAILED ACTION

1. This office action is in response to applicant's amendment filed on 10/22/2009.
2. Claims 112, 114, 116-126, 129-144, 147-151, 153, 154, 157 and 161 are pending.
3. Applicant's arguments with respect to the rejections of claims under 35 USC 103(a), have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration of the amended claims, a new ground(s) of rejection is made.

Response to Arguments

Applicant on pages 12 and 13 of the remarks argues that "and such a performing of an exclusive-OR operation a plurality of times on an adjunct to a copy of content is believed not to be taught or suggested by Chang"

Examiner respectfully disagrees and asserts that Chang teaches a direct peer-to-peer marketing (or distribution) system of copyrighted digital products and tracking marketers/distributors so that a data packet associated with the digital product is transferred from a user of a plurality of registered users to another user (see [0008]-[0012]). The data packet includes a watermark (i.e., adjunct to the content) storing each user identification code (userID, corresponding to the recited copier related information) that has transferred the data packet to another user (corresponding to the recited generating copies of the content in a succession) (see [0012]-[0013]). Thus each time the data packet is transferred to a user the watermark information is modified by adding the userID to the watermark. Furthermore, Chang's system has a mechanism to receive

watermark history data associated with the product in order to track the distribution, which corresponds to the extracting copier related information from an adjunct to content (see [0013]).

Nagel discloses a method which discourages and inhibits unauthorized storage and retrieval (copying) of unsecure (e.g., cleartext) information which has been electronically retrieved by an authorized user from a secure information source (see, e.g., col. 3, lines 10-17). Nagel further discloses a feedback operation that performs exclusive-OR operation to combine a produced bitstream with a new key each time introduced to the key register (see Fig. 5 and col. 10, lines 16-31). Nagel also discloses that by using the exclusive-OR operation in a reverse order on the generated XOR'ed bitstream produces the information packets in cleartext (corresponds to the recited extraction operation) (see Fig. 5 and col. 10, lines 32-35 and col. 12, lines 1-10).

The combined teachings of Chang and Nagel as explained above meet the limitations of the claimed invention by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 112, 114, 116-126, 129-144, 147-151, 153, 154, 157 and 161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al

(2003/0125964 A1; hereinafter Chang) in view of Nagel et al (US 5,592,549 A; hereinafter Nagel).

Regarding claim 112, 124, 125, 136, 137, 143 and 157, Chang discloses:

A method for extracting content distribution information from a copy of content (recording content distribution information in an adjunct to content) (see, e.g., Para [0012]), comprising: sequentially performing a functional transformation on and extracting content distribution information from an adjunct to a copy of content, wherein the adjunct contains copier related information (see, e.g., Para [0012], where registered users is an indication of producing successive authorized copies and storing user data in the embedded watermark corresponds to the recited copier related information; see also paragraphs [0048], [0050], [0052] and Fig. 5, where a functional transformation is illustrated).

Chang, however, does not expressly disclose that to perform inverse transformation on an adjunct to a copy of the content in order to extract (i.e., retrieve) information of an original copy of the content.

Nagel discloses a method which discourages and inhibits unauthorized storage and retrieval (copying) of unsecure (e.g., cleartext) information which has been electronically retrieved by an authorized user from a secure information source (see, e.g., col. 3, lines 10-17). Nagel further discloses a feedback operation that performs exclusive-OR operation to combine a produced bitstream with a new key each time introduced to the key register (see Fig. 5 and col. 10, lines 16-31). Nagel also discloses that by using the exclusive-OR operation in a reverse order on the generated XOR'ed bitstream,

produces the original information packets in cleartext (see Fig. 5 and col. 10, lines 32-35 and col. 12, lines 1-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement an embedding XOR operation instead of a conventional addition operation as taught in Nagel and also utilizing and inverse transformation to extract original copy of content information, in the system of Chang. This implementation inhibits and discourages unauthorized copying of a copyrighted products (see Nage, col. 3, lines 1-10).

Regarding claim 114, Chang discloses:

The method according to claim 112, wherein the modified adjunct is provided with the copy of the content (see Fig. 5 through Fig. 7).

Regarding claims 116, 129, 140 and 147, Chang discloses:

The method according to claim 112, wherein the adjunct is a watermark embedded in the content (see [0030]).

Regarding claim 126, Chang discloses:

The method according to claim 125, wherein the functional transformation was used to modify the adjunct with copier related information upon each successive generation of an authorized copy of the content originating from the original copy of the content (see [001]-[0014]).

Regarding claims 117, 130, 141 and 148, Chang discloses:

The method according to claim 125, wherein the adjunct is meta data associated with the content (see [0010] and [0012]).

Regarding claims 118, 131, 142 and 149, Nagel discloses:

The method according to claim 125, wherein the adjunct is a signature related to the content (see col. 3, Table I, where the data items corresponds to the recited signature).

Regarding claim 119, Nagel discloses:

The method according to claim 118, wherein the signature is a message digest or a hash value calculated using the content (see col. 3, lines 45-50, where the unique code added to the information corresponds to a message digest or a hash value).

Regarding claims 120 and 132, Chang discloses:

The method according to claim 125, wherein the content is copyrightable material (see [0008]).

Regarding claims 121 and 133, Chang discloses:

The method according to claim 125, wherein the copier related information includes information of a user identification associated with a user of a copier used for generation of an authorized copy of the content (see [0012]).

Regarding claims 122, 134 and 153, Chang discloses:

The method according to claim 125, wherein the copier related information includes information of an IP address associated with a copier used for generation of an authorized copy of the content (see [0036]).

Regarding claims 123, 135 and 144 , Chang discloses:

The method according to claim 125, wherein the copier related information includes information of a copy device used for generation of an authorized copy of the content by a copier (see [0036]).

Regarding claims 138, 150 and 151, Chang discloses:

The method according to claim 137, wherein the adjunct is further modified to include information indicating an approximate time when the functional transformation is being performed (see [0013] and [0030]).

Regarding claim 139, Chang discloses:

The method according to claim 137, wherein each network node relaying the packet of data through a network to a final destination performs the functional transformation on the adjunct to content in the packet of data so that the adjunct is modified to include identifying information of all such network nodes by the time it reaches the final destination (see Fig. 1, [0009] and [0029]).

Regarding claims 154 and 161, Chang discloses:

The method according to claim 143, wherein the method is performed by a BOT on the network (see [0030], where the software provided by the owner of the content corresponds to the recited BOT).

Regarding claim 155 and 156, Chang discloses:

The method according to claim 154, wherein the method is performed by the BOT on each packet of data encountered by the BOT while scouring the network so that the content distribution information determined thereby is useful for determining a network topology for the network and determining supernodes in the network (see [0012], where the transmitted packets associated with the digital product are used to track the distribution of the digital product. Each packet header contains the addresses of the origin and the destination network component which can be used to determine the

network topology and information about the sending and receiving components; [0030], where the software provided by the owner of the content corresponds to the recited BOT).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULHAKIM NOBAHAR whose telephone number is (571)272-3808. The examiner can normally be reached on M-T 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/A. N./
Abdulahakim Nobahar
Examiner
Art Unit 2432

/Gilberto Barron Jr. /
Supervisory Patent Examiner, Art Unit 2432